

WEYERHAEUSER CORPORATION

SUMMARY OF PROGRESS ON MERCURY CONTROL

Chronology of Improvements

Prior to April 27: All mercury-contaminated waste streams, with the exception of inlet box seal water, were sewered. These include the sludge from the brine process, condensate from the hydrogen coolers, outlet end box seal water, floor washings, and the overflow from the mercury washer used to process cell washings.

April 27, 1970: Stopped sludge discharge to sewer; stored it in tanks.

May 5, 1970: Completed a storage pond for sludge. Pond is an unsealed excavation in sand. Dimensions are 60' x 150' x 4'. All water loss from ponds is through seepage and evaporation.

May 7, 1970: Pumped sludge to storage pond. Operation of clarifiers was altered to reduce water content in sludge. Prior to this time sludge averaged 3 percent solids, with 40-50 ppm Hg. Solids content now 10-12 percent.

May 11, 1970: Ceased discharge to sewer of liquid wastes from mercury washer. Unit was moved outside adjacent to sludge pond. All discharges now directed to pond.

May 19, 1970: Ceased discharge to sewer of condensate from Plant No. 1 hydrogen cooler. Contaminated water now introduced into caustic water recovery system.

June 14, 1970: Outlet end box water from Plant No. 1 (126 cells) recycled into brine system. It is either added directly to brine or is used in the sludge washing process first.

July 6, 1970: Installed new hydrogen cooler system in Plant No. 2. All condensate recycled to caustic reaction.

July 13, 1970: Completed second storage pond to receive floor washings from Plant No. 1. Some clean water from steam condensate, eyewash fountains, etc. also diverted to pond.

July 28, 1970: Third pond completed to receive all floor washings and end box water from Plant No. 2.

July 30, 1970: Started adding raw sulfur to ponds. Plant personnel said they hoped it would tie up the soluble mercury in the ponds. All sewers from the cell rooms are blocked.

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Future Changes

August 8, 1970: Hydrogen cooler will be installed for Plant No. 1. Condensate will be returned to caustic reaction.

August 12, 1970: Installation of cooling system for air from end boxes and mercury pumps in Plant No. 2. Condensate will be returned to system if purity permits. If not, it will be directed to ponds.

August 17, 1970: Rotary vacuum filter test unit will be operational. Sludge will be treated to remove mercury-contaminated water for recycle into system.

September, 1970: Installation of equipment necessary to recycle end box water for Plant No. 2.

October 1, 1970: Tentative date for installation of Brinks demisters on the hydrogen cooling system for Plant No. 1 and No. 2 and on the end box air system for Plant No. 1.

Company personnel indicated additional studies are being conducted on the recovery of mercury from the sludge. They also indicated a willingness to start immediate treatment of water from sludge and other waste streams. They indicated they would like to try sodium bisulfide treatment, but understood it was not being approved by FWQA.

Further monitoring of Hg in effluent should be continued to document further improvements and to assess levels contributed by condensate from barometric cooler.